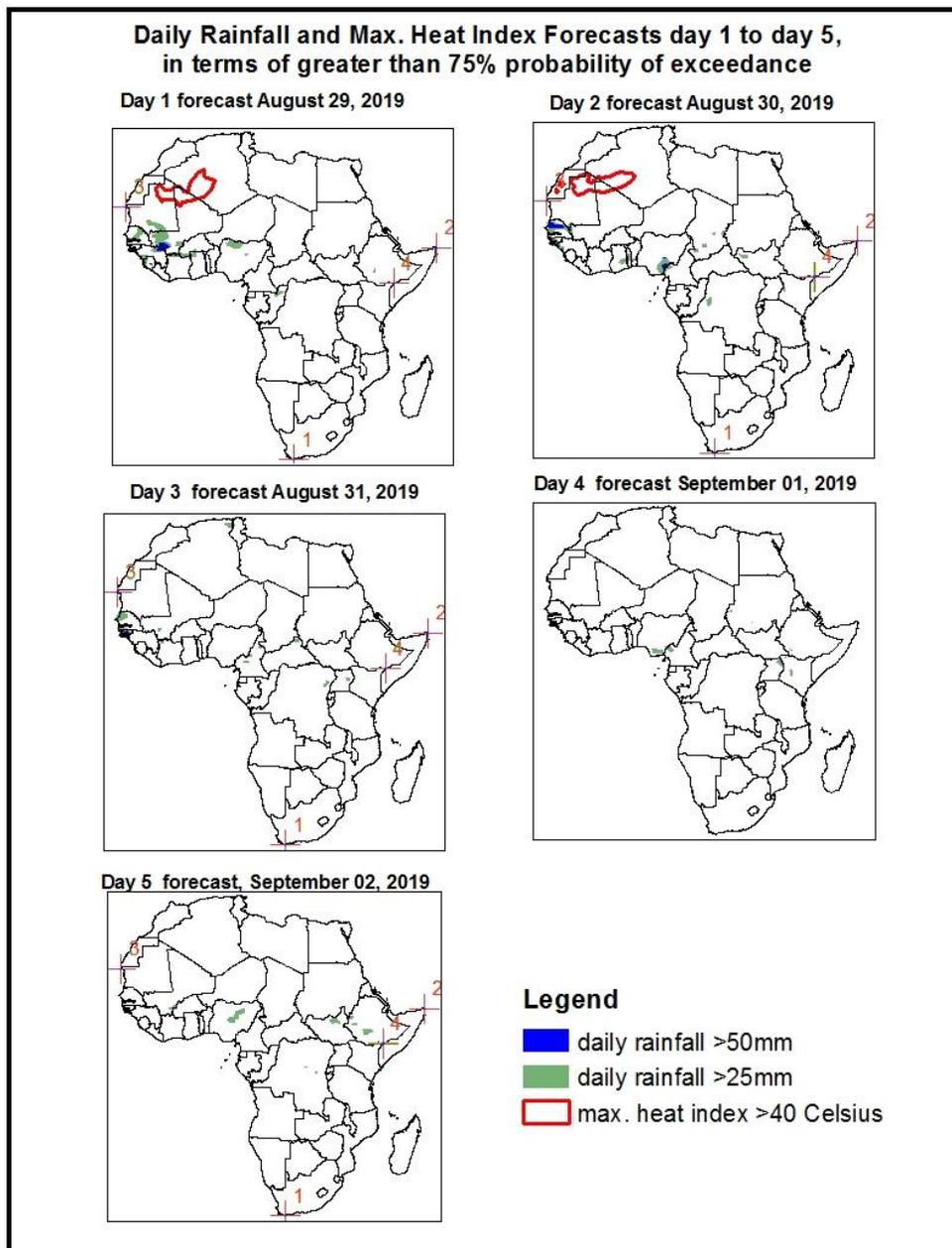


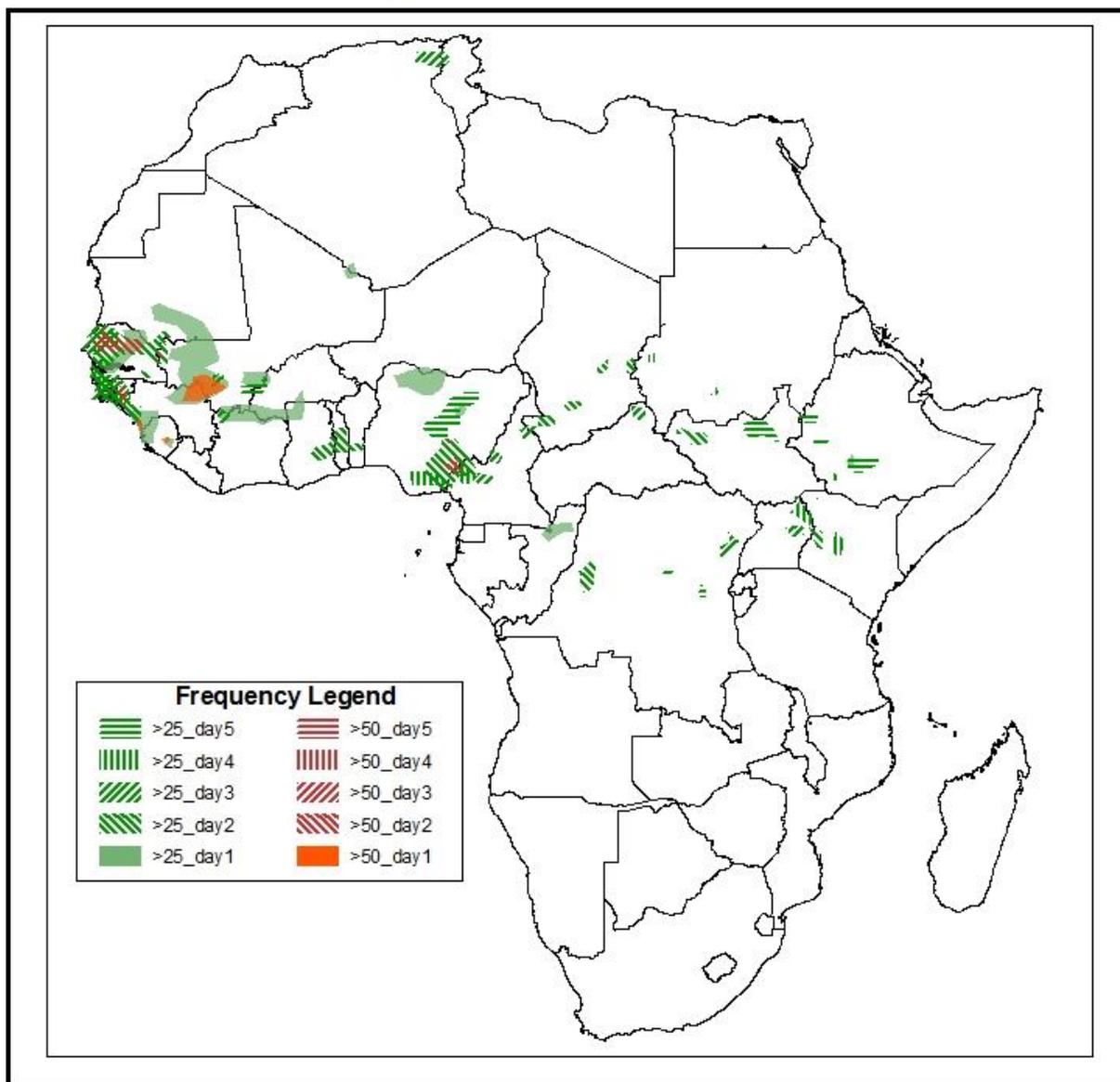
1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on August 28, 2019)

1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: 29 – 02 September, 2019)

The forecasts are expressed in terms of high probability of precipitation (POP), valid 06Z to 06Z, and exceedance probability of maximum heat index (>40°C), based on the NCEP/GFS and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



Five Days Rainfall Forecast Summary 29 August - 02 September, 2019

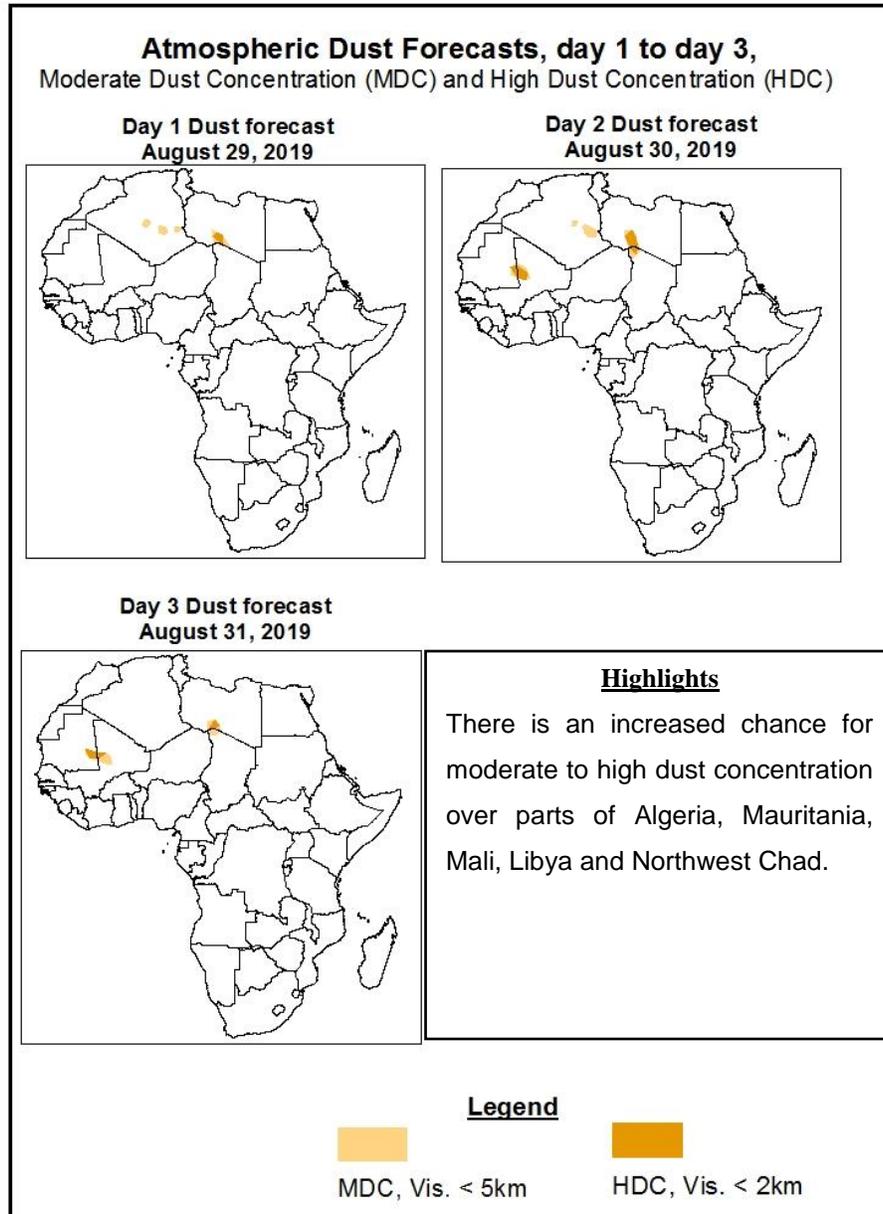


Highlights

- The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries.
- Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa.
- At least 25mm for two or more days is likely over Sahel region. There is an increased chance for daily rainfall to exceed 50mm over southwestern and northern Guinea, northern Senegal, Southwest Mali and Southeast Nigeria.
- There is an increased chance for daily maximum heat index to exceed 40°C over Western Sahara, Algeria, Mali and Mauritania.

1.2. Atmospheric Dust Concentration Forecasts (valid: 29 – 31 August 2019)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



1.3. Model Discussion, Valid: 29 – 02 September 2019

The Azores High Pressure system over the Northeast Atlantic is expected to strengthen and shift to the North, with its central pressure value increasing from 1022hPa to 1029hPa

The St. Helena High Pressure system over Southeast Atlantic Ocean is expected to weaken with its central pressure value decreasing from 1033hPa to 1030hPa during the forecast period.

The Mascarene High Pressure system over Southwest Indian Ocean is expected to weaken with its central pressure value decreasing from 1028hPa to 1025hPa during the forecast period.

Thermal low across the Sahel region is expected to maintain average central pressure value of 1009 hPa, and likely to deepen slightly with central pressure value decreasing to 1008 hPa towards end of forecast period. The thermal low over Chad is expected to decrease from 1010hPa to 1006 hPa and shift to Niger during the forecast period.

At 925-hPa level, strong dry northerly to northeasterly flow is expected to prevail across Northwest Africa. In contrast, moist southwesterly flow from the Atlantic Ocean is expected to prevail across the Gulf of Guinea and the Sahel regions, and the neighboring areas of Central Africa.

At 850-hPa, lower-level wind convergences are expected to remain active over portions of the Sahel and Lake Victoria regions. An area of cyclonic circulation is expected to prevail across West Africa during the forecast period.

At 700-hPa, a broad area of anticyclonic flow is expected over Northwest and West Africa and a trough in the easterly flow near Nigeria is expected to propagate westwards across the Gulf of Guinea countries at end of forecast period.

At 500-hPa, wind speed associated with easterly flow is expected to exceed 30kts across portions of West Africa during the forecast period.

The monsoon flow from the Atlantic Ocean with its associated lower-level convergence, and westward propagating meso-scale convective systems are expected to enhance rainfall over Western Africa, portions of the Sahel and Central Africa countries. Lower-level wind convergences are expected to enhance rainfall across portions of the Greater Horn of Africa. At least 25mm for two or more days is likely over Sahel region. There is an increased chance for daily rainfall to exceed 50mm over southwestern and northern Guinea, northern Senegal, Southwest Mali and Southeast Nigeria. There is an increased chance for daily maximum heat index to exceed 40°C over Western Sahara, Algeria, Mali and Mauritania.

2.0. Previous and Current Day Weather over Africa

2.1. *Weather assessment for the previous day* (August 27, 2019)

Daily rainfall amount exceeded 25mm over Nigeria, Western Senegal, Liberia, Cote D'Ivoire, southwestern Cameroon, and eastern Ethiopia, and exceeded 50mm over northern Liberia, Cote D'Ivoire, southern Nigeria, southwestern Cameroon and portions of Somalia.

2.2. *Weather assessment for the current day* (August 28, 2019)

Deep convective clouds are observed over West Africa, Central Africa and local areas in the Greater Horn of Africa.

